LEFT VENTRICULAR CONDUITS TO CORONARY ARTERIES AND METHODS FOR CORONARY BYPASS

Abstract of the Disclosure

Left ventricular conduits and related methods are disclosed for achieving bypass of a partially or completely occluded coronary artery. More broadly, conduits for allowing communication of bodily fluids from one portion of a patient's body to another and related methods are disclosed, including conduits for forming a blood flow path from a chamber of the heart to a vessel or from one vessel to another. In other embodiments, the conduits achieve a coronary artery bypass by allowing blood communication between the left ventricle and the coronary artery or between a proximal portion of the coronary artery and a distal portion of the coronary artery. The conduits may be placed completely through the heart wall or extend only partially therein. Conduits may take on a variety of configurations for allowing the control of blood flow therethrough, including curved or tapered shapes. The conduits may also follow a variety of paths, including direct transmyocardial communication between the left ventricle and the coronary artery, or through the myocardium and into the intrapericardial space and then into the coronary artery. The conduits may be implanted through a variety of methods, including minimally invasive techniques. Also disclosed are various preferred embodiments of medical devices and related methods for implanting the conduits including rigid delivery rods for penetrating bodily tissue. The delivery rods may be solid, thus being trocar-like, or hollow to form a self-implantable conduit. Other preferred rod embodiments may have the conduits mounted thereon and take the form of a stylet or the like. The conduits may be one-piece, continuous conduits or made up of a number of plural sections joined together. Disclosures of various anastomosis devices are provided.

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